DOCUMENT RESUME

ED 253 343 PS 014 902

AUTHOR Poteat, G. Michael; Ironsmith, Marsha
TITLE The Modification of Children's Social Competence: Issues in Applied Research.
PUB DATE [83]
NOTE 28p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Adolescents; Aggression; *Behavior Modification; *Children; *Cognitive Restructuring; *Interpersonal Competence; Peer Relationship; Preschool Children; *Research Problems; Social Behavior; Social Isolation
IDENTIFIERS Coaching; Popularity; Rehearsal Strategies

ABSTRACT

This paper reviews critical issues in the assessment and modification of children's social competence and reports on preliminary data collected in a longitudinal study of children's social behavior. A number of unanswered applied research questions concerning assessment and modification of social competence are noted: (1) Specific behaviors of socially competent and socially incompetent children have not been clearly differentiated; (2) The predictive validity of sociometric status in young children and rating scales used with preschoolers has not been established; (3) Little experimental evidence exists for generalization from treatment setting to natural environment, and data indicate that the analogue test has little or no validity; and (4) The process by which children become differentiated as socially effective or ineffective has not been adequately described. In an attempt to address some of these issues, a longitudinal study attempted to predict which children would exhibit social problems when entering public school from observations of their behavior during the early preschool years. Subjects consisted of all 40 children enrolled in classrooms for 3- and 4-year-olds at three day care centers. Primary data were collected according to a 22-category behavioral observation code. Results of the first year of observation indicated that children exhibited a relatively low frequency of interaction and a correspondingly high percentage of time spent in solitary play during preschool. Several children who appear to be socially popular are being studied to identify factors involved in their apparent social success. (Three tables present data and provide examples of commercially published curriculum programs for training social skills.) (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED253343

The Modification of Children's Social Competence: Issues in Applied Research

G. Michael Poteat and Marsha Ironsmith

East Carolina University

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
G. Michael Poteat
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS 014902

Abstract

The assessment and modification of children's social competence has become an increasingly popular research topic during the past decade. The impetus for this research has been provided through a number of diverse efforts including: (a) clinical assertiveness training, (b) developmental-social psychology, (c) social problem solving, (d) experimental animal psychopathology, and (e) investigations in the primary prevention of psychopathology. Several conclusions can be drawn from the available data. First, low peer sociometric status can be correlated with the future occurrence of social maladjustment and psychopathology. Second, children's social behaviors and peer sociometric status can be modified. Third, analogues of some forms of human social disorders exists in investigations of experimentally induced psychopathology in nonhuman primates.

Utilizing the rationale provided by the available research data, applied investigators have proceeded to modify various social behaviors tentatively identified as components of social competence. A survey of the applied research suggests that a common intervention technology has been developed, and which consists of instruction, modeling, role-playing, and feedback. However, a number of

applied research questions remain unanswered: (a) There is no clear differentiation between behaviors that characterize socially competent and incompetent children; (b) almost no experimental evidence exists for generalization from the treatment setting to the natural environment; and (c) the process by which some children develop into effectively functioning social agents and others into unpopular peers has not been clearly elucidated.

The paper reviews critical issues in the assessment and modification of children's social competence and reports on the preliminary data collected in a longitudinal study of children's social behavior. The need for further developmental research in the identification of the crucial components of children's social competence is emphasized.

The Modification of Children's Social Competence: Issues in Applied Research

The terms social competence and social skills are difficult to define (Curran, 1979; Foster & Ritchey, 1979). Nonetheless, social competence can be used to refer to the global ability to function effectively as a social agent and the term social skills defined as the constituent behaviors of social competence. Despite the definitional problems, the assessment and modification of children's social competence has become an increasingly popular topic during the past decade. Michelson and Wood (1980) reported that only 9 articles on the training of children's social skills (social competence) were published between 1940 and 1970 compared to over 50 research articles published between 1970 and 1980. A computer-based search (PsycINFO) of the literature published between 1978 and 1982 resulted in the identification of over 100 articles related to either the assessment, development, or modification of children's social skills or social competence. During the past 5 years, the number of research reports published in the area of children's social competence has increased so dramatically that it is no longer possible to succinctly synthesize the research data (see Hartup, 1983).

The impetus for this research has been provided

through a number of diverse efforts including: (a) clinical assertiveness training (e.g., Bellack & Hersen, 1979); (b) developmental-social psychology (e.g, Gottman, 1977; Renshaw & Asher, 1983); (c) social problem solving (Shure & Spivack, 1979); (d) experimental animal psychopathology (Suomi, 1979); and (e) investigations in the primary prevention of psychopathology (Cowen, Pederson, Babigian, Izzo, & Trost, 1973). Several conclusions can be derived from the available data. First, low peer sociometric status (SMS), or poor peer relations, in childhood is correlated with the future occurrence of social maladjustment and psychopathology (Cowen et al., 1973; Roff, 1961). Second, children's social behaviors and peer SMS can be modified (Oden & Asher, 1977; Ladd, 1981). Third, analogues of some forms of human behavioral disorders, which are related to social competence, exist in investigations of experimentally-induced psychopathology in nonhuman primates (Harlow, Gluck, & Suomi, 1972; Suomi, 1979).

Utilizing the rationale provided by the available research data, applied investigators have proceeded to modify various social behaviors tentatively identified as components of social competence. Commercial publishers have also responded by developing a number of different

treatment packages for the use of applied psychologists and educators. These packages typically consist of spiral-bound notebooks containing descriptions of typical social problems and possible treatment approaches. In addition, several of the commercially available treatment packages include videotapes of assessment and therapeutic procedures. Schumaker, Pederson, Hazel, and Meyen (1983) have recently reviewed 12 commercially available social skills training curricula designed for use with mildly handicapped adolescents. Table 1 contains descriptive information on four different programs now available for use with children and adolescents. In addition to the commercially published programs currently available, a number of handbooks, manuals, and texts have been published over the past 5 years that have been either exclusively or partially directed towards the modification of children's social skills (e.g., Cartledge & Milburn, 1980; Eisler & Frederiksen, 1980).

Insert Table 1 about here

A survey of the research suggests that a common technology has evolved in the modification of children's social competence. Typically, children's social competence

is first assessed through some combination of teacher-judgments, measures of peer SMS, analogue (role-playing) observations, and observations in the natural environment. Selected behaviors are then modified through instruction, modeling, role-playing, and feedback. (Behaviors frequently targeted for modification include the amount of social interaction with peers, aversive behaviors such as physical aggression, and positive social behaviors such as smiling and greeting peers.) Treated populations have included children and adolescents identified as socially isolated, mentally handicapped, socially incompetent, learning disabled, and aggressive.

The research reported by Oden and Asher (1977) and Ladd (1981) represents an effort to modify children's social competence through a technique labeled as coaching, which consists of instruction, practice, and feedback. Oden and Asher taught 11 elementary students identified on the basis of low peer SMS to increase their participation (e.g., paying attention), communication (e.g, taking turns), and validation support (e.g., offering help or encouragement) during interaction with peers. The intervention resulted in significantly higher SMS scores for the experimental subjects, but there was no evidence of behavioral change.

Ladd utilized Oden and Asher's coaching strategy with the addition of guided and self-directed rehearsal. He was able to successfully modify both the low peer SMS and social behaviors of 12 elementary students. Ladd also controlled for the effects of experimenter attention and demonstrated the maintenance of therapeutic gains at a 4-week follow-up.

Berler, Gross, and Drabman (1982) trained 3 learning disabled students, identified on the basis of low peer SMS and teacher judgments, to increase eye contact and appropriate verbal content in response to criticism. Children were coached on the appropriate behaviors using modeling, feedback, and praise. Increases in the targeted behaviors were observed during analogue (role-playing) assessments, but generalization of treatment gains to the natural environment was not obtained. Also, peer SMS was not altered.

Despite the overall consensus concerning training methods, a number of applied research questions remain unanswered:

(1) There is no clear differentiation between those specific behaviors which characterize socially-competent and socially-incompetent children. As an example, some research (Poteat, 1981/1982) has indicated that the

relationship between peer SMS and observable behavior is extremely complex and correlated with both subject gender and environmental setting (Table 2). For example, it was observed that high- and low-SMS 4th-grade female students demonstrated behavioral differences primarily in nonacademic settings (e.g., during recess or art classes). For high- and low-SMS 4th-grade male students, behavioral differences were most pronounced in nonacademic settings.

Insert Table 2 about here

Other research indicates that unpopular (or low SMS) students more frequently engage in aggressive or hostile social behaviors and that popular students exhibit more prosocial behaviors (Berndt, 1983). Nonetheless, the relationship between peer SMS (as a general index of social competence) and specific social behaviors remains obscure.

(2) Another area of concern is the predictive validity of sociometric status in young children. While SMS scores of elementary and junior high school students (based on nomination scores) have been shown to predict later adjustment problems (Ullman, 1957; Roff, Sells, & Golden, 1972), no such information has been obtained with younger children nor has any predictive validity been

established for rating scales, such as those developed by Asher, Singeton, Tinsley, and Hymel (1979) for use with preschoolers (Hymel, 1983).

There is also uncertainty among researchers as to which group of child is at risk for long-term adjustment problems. Many researchers distinguish between socially-rejected children, who receive many negative and few positive nominations and are described as aggressive and disruptive, and socially-isolated children, who receive few nominations, either positive or negative, and who are described as shy and withdrawn (Gronlund & Anderson, 1957; Coie & Kupersmidt, 1983; Dodge, 1983). However, there is no agreement about which of these groups should be the target of intervention efforts (Asher, Markell, & Hymel, 1981; Asher, 1983; Coie & Kupersmidt, 1983), nor is the method of assessing SMS or defining categories uniform across studies. We need to know more about the measurement of SMS in young children and about its relationship to social behavior.

(3) Very little experimental evidence exists for generalization from the treatment setting to the natural environment, and some data have indicated that the frequently used analogue or role-playing test has little or no empirical validity (Bellack, Hersen, & Lamparski, 1979;

Bellack, Hersen, & Turner, 1978; Berler, Gross, & Drabman, 1982). A notable exception to the failure to demonstrate treatment generalization and maintenance is the work of Ladd (1981). A critical review of the intervention research can be found in the work of Conger and Keane (1981).

(4) The process by which some children develop into effectively functioning social agents and others into unpopular peers or social isolates has not been clearly elucidated. This absence of data has prevented the early identification and treatment of young children at risk for future social maladjustment. One popular hypothesis involves the negative effect of social isolation or withdrawal on the development of appropriate social skills. However, as pointed out by Suomi (1981), both humans and rhesus monkeys frequently fail to develop social competence even when exposed to peers in a typical social environment. The lack of knowledge concerning the ontogeny and behavioral parameters of social competence is reflected in the differentiation of socially isolated and socially rejected children. As Gottman (1977) demonstrated, the socially rejected (or unpopular) child may not have a deficit in the amount of time spent in peer interaction. Similarly, a socially isolated child (classified on the

basis of demonstrating little peer interaction) is not necessarily an unpopular child. Nonetheless, proponents of social skills training often focus on the frequency or duration of social interaction without reference to the etiology of the social problems faced by various populations of clients (e.g., Powell & Lindeman, 1983).

We are now conducting research to determine the developmental sequences leading to social competence or social incompetence. We have begun by recruiting 40 subjects in 3 diverse day care centers and plan to follow the social development of these children until they enter the 1st-grade. The subjects consist of all children enrolled in the classrooms for 3- and 4-year-old children at the 3 day care centers. The primary instrument employed in the research project is a 22-category behavioral observation code. Data will also be collected on a number of additional variables including demographic family information (SES, number of siblings), cognitive skills, social problem-solving abilities, teacher judgments of social skills, and peer SMS.

The overall aim of this research project is to determine if children who have social problems when entering public school (e.g., in kindergarten and the 1st-grade) can be identified on the basis of observable

behavior during the early preschool years. A secondary goal is the elucidation of the relationship between concurrent behavior and the sociometric status of preschoolers that should be the focus of intervention efforts. Some preliminary results of the first year of the proposed 4 year observational study are contained in Table 3.

Insert Table 3 about here

The data in Table 3 suggests that preschool male and female preschoolers display similar patterns of social behavior during free play. Girls did emit less personal (physical) and object aggression but the overall occurrence of social behaviors is remarkably consistent across gender. The most notable aspect of the data contained in Table 3 is the relatively low frequency of interaction with either peers or adults and the corresponding high percentage of time spent in noninteraction or solitary play. These data are, however, generally consistent with the observations of other researchers (e.g., see Hartup, 1983, p. 117).

Since the aim of the present study is to determine the early behavioral precursors of low peer status when the child enters the public schools, it is interesting to

speculate about individual variations in social behaviors. For instance, one male preschooler (Robby) has consistently exhibited very high rates of both object and personal aggression (.05 and .13 per minute respectively, or one aggressive act every 5.5 minutes), and it is important to determine if these high rates of aggression will result in peer rejection in the future. The present research consensus would suggest that Robby would developed into a child who is actively rejected by his peers and would receive a large number of negative nominations on a peer sociometric. Both future sociometric status and the longitudinal consistency of Robby's aggressive behavior are being assessed.

A second child (Sara) was involved in peer interaction less than 1% of the time observed (compared to a mean of 19%) and also demonstrated an unusually high level of interaction with adults. The current research hypothesis would suggest that Sara has a high potential for developing into a socially neglected child who is neither liked nor disliked by her peers. Sara's low peer interaction does not appear to be related to negative social behaviors because she was never observed to engage in aggression or negative verbal behaviors. Nonetheless, Sara was very infrequently approached by her peers and also made few

approaches to peers. The assessment of Sara's future sociometric status and the consistency of her social behavior during the preschool years should provide information concerning the development of social isolation or social neglect.

In addition, several children appear to be socially popular and have exhibited considerably higher than average measures of peer interactions and are frequently approached by peers. The peer sociometric status of these children is predicted to be high and attempts are underway to conduct a finer grained analysis of their apparent social success. To aid in these analysis, videotapes of all subjects are being collected with an objective of 1 hour of videotape per subject per year. These videotapes will allow for the post hoc analysis and objective investigation of behaviors leading to peer popularity and rejection.

Overall, a number of dramatic and exciting developments have occurred in the area of research encompassing the development of children's social competence. Nonetheless, continued research aimed at the identification of the crucial behavioral components of successful socially functioning is necessary. The relationship between observable behavior and peer sociometric status has been explored in a variety of

studies but a number of questions remain unanswered and the majority of therapeutic intervention studies have been only marginally successful. The development of effective social functioning (i.e., social competence) can only be assessed through the analysis of longitudinal studies which examine the child's behavior in the real world. Laboratory studies can supplement but not replace this link between the child's early social behavior and future behavior and social status.

Table 1.

Examples of Commercially Published Curriculum Programs for Training Social Skills

---

My Friends and Me Duane E. Davis. Published by American Guidance Service. Description: Designed for use with preschool children, this program consists of activities designed to teach personal identity and social skills. The kit includes audiocassettes, an activity board, and dolls. Price: $280.00.[1]

The Walker Social Skills Curriculum: The ACCEPTS Program Hill M. Walker, Scott McConnell, et al. Published by Pro-Ed. Description: A systematic program designed to teach handicapped children the skills necessary to function effectively in the less restrictive environment of the regular classroom. Curriculum includes 28 classroom competencies and social skills (e.g., listening to the teacher, eye contact, sharing). Price: Curriculum guide (appx. 200 pages) $21.00; ACCEPTS Videotape $160.00.[2]

Let's Talk Elizabeth H. Wiig. Published by Charles E. Merrill. Description: Designed to develop and strengthen the prosocial communication skills of pre-adolescents and adolescents. Utilizes a card game

Table 1. (continued)

format designed to increase communicative functions. Price: $39.00[1] (includes manual, forms, and cards).

Think Aloud Bonnie W. Camp & Mary Ann Bash. Published by Research Press. Description: Think Aloud provides structured lesson plans designed to teach children to make full use of their cognitive skills in order to guide their social behavior and to solve problem situations. It consists of 23 lessons with detailed scripts and supplementary materials. Price: $46.95[2] for spiral bound manual.

Note. The descriptions contained in this Table are based on the publisher's descriptions contained in catalogs and are not intended as evaluations of the materials.

[1] Price from the publisher's 1983 catalog.

[2] Price from the publisher's 1984 catalog.

Table 2.

Univariate Analyses of Behavioral Observations for High and Low SMS, Male and Female Students in Academic and Nonacademic Settings

	Low SMS		High SMS			
	M	SD	M	SD	F	p
ACADEMIC SETTINGS						
Male Students						
Peer Interaction	11.8	6.5	9.7	6.7	.595	.44
Work	69.1	13.3	80.1	15.6	3.454	.07
Solitary Play	11.0	13.3	80.1	15.6	4.287	.05
Noninteraction	4.5	3.0	4.2	6.0	.030	.86
Negative Verbal	.036	.049	.006	.009	4.276	.05
Aggression	.008	.012	.001	.003	3.417	.07
Peer Approaches	.023	.019	.041	.034	2.441	.13
Female Students						
Peer Interaction	8.3	6.6	9.5	5.6	.256	.61
Work	75.5	16.0	82.2	12.2	1.676	.20
Solitary Play	7.7	7.8	4.1	5.6	2.096	.15
Noninteraction	6.0	8.0	2.7	3.1	2.245	.14
Negative Verbal	.006	.011	.005	.013	.090	.76
Aggression	.005	.011	.001	.002	1.800	.19
Peer Approaches	.021	.020	.030	.018	1.464	.19

Table 2. (continued)

NONACADEMIC SETTINGS						
Male Students						
Behaviors	**Low SMS**		**High SMS**			
	M	**SD**	**M**	**SD**	**F**	**p**
Peer Interaction	72.5	18.6	68.7	18.3	.248	.62
Solitary Play	15.1	11.5	15.3	13.9	.002	.96
Noninteraction	5.8	6.6	4.9	5.0	.147	.71
Negative Verbal	.067	.115	.050	.068	.188	.67
Aggression	.028	.036	.017	.028	.689	.42
Peer Approaches	.085	.046	.151	.127	2.789	.10
Female Students						
Peer Interaction	54.9	17.0	70.1	20.6	4.893	.04
Solitary Play	25.1	15.0	20.5	13.4	.786	.38
Noninteraction	9.6	9.6	3.9	4.3	4.450	.04
Negative Verbal	.065	.086	.047	.075	.271	.61
Aggression	.011	.020	.007	.019	.315	.58
Peer Approaches	.037	.052	.101	.074	7.543	.01

Table 2. (continued)

Note. Probability levels are with 1 & 22 degrees of freedom for analyses of male students' behavior and 1 & 28 degrees of freedom for analyses of female students' behavior.

Note. State behaviors (Peer Interaction, Work, Solitary Play, & Noninteraction) are expressed as a percentage of observations in which the behavior was scored and event behaviors (Negative Verbal, [Personal] Aggression, and Peer Approaches) are expressed in rate per minute.

Table 3.

Preschooler Social Behaviors During Free Play In Three Day Care Centers

	Boys		Girls	
Behaviors	M	SD	M	SD
Peer Interaction	18	10	19	10
Adult Interaction	10	5	12	7
Solitary Play	38	10	38	10
Noninteraction	18	10	17	7
Verbal Positive	.02	.02	.02	.02
Verbal Negative	.03	.03	.04	.04
Personal Aggression	.03	.03	.01	.02
Object Aggression	.03	.02	.02	.03
Approaches to Peers	.04	.05	.05	.05
Peer Approaches	.05	.06	.07	.07
Aggression by Peers	.02	.02	.02	.03

Note. N = 19 boys and 20 girls.

Note. State behaviors (Peer Interaction, Adult Interaction, Solitary Play, and Noninteraction) are expressed as a percentage of observation in which the behavior was observed. The remaining event behaviors are expressed in rate per minute.

References

Asher, S. R. (1983). Social competence and peer status: Recent advances and future directions. Child Development, 54, 1427-1434.

Asher, S. R., Markell, R. S., & Hymel, S. (1981). Identifying children at risk in peer relations: A critique of the rate-of-interaction approach to assessment. Child Development, 52, 1239-1245.

Asher, S. R., Singleton, L. C., Tinsley, B. R., & Hymel, S. (1979). A reliable sociometric measure for preschool children. Developmental Psychology, 15, 443-444.

Bellack, A. S. (1979). Behavioral assessment of social skills. In A. S. Bellack & M. Hersen (Eds.), Research and practice in social skills training (pp. 75-104). New York: Plenum.

Bellack, A. S., Hersen, M., & Lamparski, D. (1979). Role-play test for assessing social skills: Are they valid? Are they useful? Journal of Consulting and Clinical Psychology, 47, 335-342.

Bellack, A. S., Hersen, M., & Turner, S. M. (1978). Role-playing tests for assessing social skills: Are they valid? Behavior Therapy, 9, 448-461.

Berler, E. S., Gross, A. M., & Drabman, R. S. (1982). Social skills training with children: Proceed with caution. Journal of Applied Behavior Analysis, 15, 41-53.

Berndt, T. J. (1983). Correlates and causes of sociometric status in childhood: A commentary on six current studies of popular, rejected, and neglected children. Merrill Palmer Quarterly, 29, 439-448.

Cartledge, G., & Milburn, J. F. (1980). Teaching social skills to children. New York: Pergamon.

Coie, J. D., & Kupersmidt, J. B. (1983). A behavioral analysis of emerging social status in boy's groups. Child Development, 54, 1400-1416.

Conger, J. C., & Keane, S. P. (1981). Social skills intervention in the treatment of isolated or withdrawn children. Psychological Bulletin, 90, 478-495.

Cowen, E. L., Pederson, A., Babigian, H., Izzo, L. D., & Trost, M. A. (1973). Long term follow-up of early detected vulnerable children. Journal of Consulting and Clinical Psychology, 41, 438-446.

Curran, J. P. (1979). Pandora's box reopened? The assessment of social skills. Journal of Behavioral Assessment, 1, 55-771.

Dodge, K. A. (1983). Behavioral antecedents of peer social status. Child Development, 54, 1427-1434.

Eisler, R. M., & Frederiksen, L. W. (1980). Perfecting social skills. New York: Plenum.

Foster, S. L., & Ritchey, W. L. (1979). Issues in the assessment of social competence in children. Journal of Applied Behavioral Analysis, 12, 625-638.

Gottman, J. M. (1977). Toward a definition of social isolation in children. Child Development. 46, 709-718.

Gronlund, N. E., & Anderson, L. (1957). Personality characteristics of socially accepted, socially neglected, and socially rejected junior high school pupils. Educational Administration and Supervision, 43, 329-338.

Hartup, W. W. (1983). Peer relations. In E. M. Hetherington (Ed.), Handbook of child psychology: Vol. 4. Socialization, personality, and social development (pp. 103-196). New York: John Wiley & Sons.

Hymel, S. (1983). Preschool children's peer relations: Issues in sociometric assessment. Merrill-Palmer Quarterly, 29, 237-260.

Ladd, G. W. (1981). Effectiveness of a social learning method for enhancing children's social interaction and peer acceptance. Child Development, 52, 171-178.

Michelson, L. & Wood, R. (1980). Behavioral assessment and training of children's social skills. In M. Hersen, R. M. Eisler, & P. M. Miller (Eds.), Progress in behavior modification: Vol. 8 (pp. 241-292). New York: Academic Press.

Oden, S. & Asher, S. R. (1977). Coaching children in social skills for friendship making. Child Development, 48, 495-506.

Poteat, G. M. (1982). Behavioral correlates of the peer sociometric status of elementary students (Doctoral dissertation, University of Tennessee, 1981). Dissertation Abstracts International, 42, 3876B.

Powell, T. H., & Lindeman, D. P. (1983). Developing a social-interaction program for young handicapped children. Exceptional Children, 50 (1), 72-75.

Renshaw, P. D., & Asher, S. R. (1983). Children's goals and strategies for social interaction. Merrill-Palmer Quarterly, 29, 353-374.

Roff, M. (1961). Childhood social interactions and young adult bad conduct. Journal of Abnormal and Social Psychology, 333-337.

Roff, M., Sells, S. B., & Golden, M. M. (1972). Social adjustment and personality development in children. Minneapolis: University of Minnesota.

Schumaker, J. B., Pederson, C. S., Hazel, J. S., & Meyen, E. L. (1983). Social skills curricula for mildly handicapped adolescents: A review. Focus on Exceptional Children, 16 (4), 1-16.

Shure, M. B., & Spivack, G. (1979). Interpersonal problem solving thinking and adjustment in the mother-child dyad. In M. W. Kent & J. E. Rolf (Eds.), Social competence in children (pp. 201-219). Hanover, NH: University Press of New England.

Suomi, S. J. (1979). Peers, play, and primary prevention in primates. In M. W. Kent & J. E. Rolf (Eds.), Social competence in children (pp. 127-149). Hanover, NH: University Press of New England.

Ullman, C. A. (1957). Teachers, peers, and tests as predictors of adjustment. Journal of Educational Psychology, 48, 257-267.